

**LISTING OF THE CLAIMS**

The listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Previously Presented) A method effective to protect one or more properties of biological material during the process of sterilization which comprises:
  - a) packaging the biological material;
  - b) providing a protective atmosphere within the package,wherein providing a protective atmosphere within the packaging of the packaged biological material is carried out by at least partially removing an original atmosphere under vacuum, and replacing the original atmosphere with a reducing atmosphere or a mixture of an inert atmosphere and a reducing atmosphere, and
  - c) sterilizing the packaged biological material in the presence of said protective atmosphere to reduce and/or inactivate an adventitious agent or adventitious agents.
- 2 - 31. (Canceled)
32. (Previously Presented) The method of claim 1, wherein the inert atmosphere comprises at least one inert gas selected from the group consisting of nitrogen and argon.
33. (Previously Presented) The method of claim 1, wherein the reducing atmosphere comprises at least one reducing gas selected from the group consisting of hydrogen, hydrogen sulfide and carbon monoxide.
34. (Previously Presented) The method of claim 1, wherein the mixture of inert atmosphere and reducing atmosphere contains from about 0.5 to about 99% by volume reducing gas.
35. (Previously Presented) The method of claim 1, wherein the original atmosphere is at least partially removed under a vacuum of from about 1 to about 200 torr.

36 - 51. (Canceled)

52. (Previously Presented) The method of claim 1, wherein the biological material is bone.

53 - 63. (Canceled)

64. (Previously Presented) The method of claim 1, wherein the biological material is selected from the group consisting of food, tissue, therapeutically useful substance and therapeutically useful device.

65 - 88. (Canceled)